Chapter 2
Regulatory Setting

Introduction

Surface water and groundwater quality is regulated in California through many laws, regulations, and ordinances administered by local, state, and federal agencies. Water quality regulation and permitting processes are designed to limit the discharge of pollutants to the environment in an effort to achieve the highest surface and groundwater quality, protect fish and wildlife and their habitats, and protect other beneficial uses (e.g., domestic and agricultural water supply and recreational resources). This section describes the regulations relevant to irrigated lands where water is applied for the purpose of producing corps. These crops include, but are not limited to, land planted to vineyard, row, pasture, field, and tree crops, commercial nurseries, nursery stock production, managed wetlands, rice production, and greenhouse operations with permeable floors that do not currently discharge under waste discharge requirements (WDRs), National Pollutant Discharge Elimination System (NPDES) permits, Municipal Separate Storm sewer System, or other NPDES permits within the State of California.

Federal Programs Affecting Irrigated Lands Discharges

Clean Water Act

The federal Clean Water Act (CWA) was established to regulate discharges of pollutants into waters of the United States. The CWA requires permits for all point source discharges, construction related discharges, and direct discharges of fill into or excavations from within a water of the United States, including wetlands.

Water runoff from irrigated cropland may contain pollutants that ultimately reach waters of the United States. Starting in the late 1980s, the U.S. Environmental Protection Agency (EPA) has led efforts to address polluted runoff, i.e., nonpoint sources, (NPS) that are responsible for the majority of water quality impairments in the nation; however, these sources are not subject to CWA permits or other regulatory requirements under federal law. Under Section 319 of the CWA, the

assessment and management of NPS pollution, including agricultural runoff, is the responsibility of the states.

Clean Water Act Section 319

Section 319 requires that each state produce an NPS assessment report that identifies the waters in that state that are impaired or threatened by NPS pollution and the sources contributing to the impairment. Under Section 319, the state must also identify the best management practices (BMPs) or measures to be used to control each pollution source identified (NPS management program) and specific criteria that define successful pollution control practices and measures. The EPA reviews and provides final approval for each state's NPS management program.

Coastal Zone Act Reauthorization Amendment of 1990

The Coastal Nonpoint Source Pollution Control Program (Section 6217) addresses NPS pollution problems in coastal waters. Significant portions of the threats to coastal waters are caused by NPS pollution. Major sources of NPS pollution in coastal waters include agriculture and urban runoff. Section 6217 requires the 29 states and territories with approved Coastal Zone Management Programs to develop Coastal Nonpoint Source Pollution Control Programs. In its program, a state or territory describes how it will implement NPS pollution controls, known as management measures, that conform with those described in Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters. If these original management measures fail to produce the necessary coastal water quality improvements, a state or territory then must implement additional management measures to address the remaining water quality problems.

The coastal NPS program strengthens the links between federal and state/territory coastal zone management and water quality programs to protect coastal waters and habitats from certain land management activities. The EPA and the National Oceanic and Atmospheric Administration (NOAA) administer this program jointly. (EPA 2005.)

California has met the intent of both Section 319 of the CWA and CZARA by incorporating these requirements under a single NPS program rather than attempting to administer two separate programs.

National Toxics Rule (40 CFR Part 131.36)

The National Toxics Rule is the EPA's rule promulgating numeric water-quality criteria necessary to bring all States into compliance with the Clean Water Act. The Toxics Rule applies to the 14 States and Territories that were without EPA-approved criteria when the final rule was published (Alaska, Arkansas, California, Florida, Idaho, Kansas, Michigan, Nevada, New Jersey, Rhode Island,

Vermont, Washington, District of Columbia, and Puerto Rico). For these States and Territories, the criteria in the Toxics Rule are the legally enforceable standards for all purposes and programs under the CWA.

California Toxics Rule (40 CFR Part 131.38)

The California Toxics Rule adds numeric water quality criteria to the Federal Register for more than 126 chemicals that pollutant dischargers must test for; and, in some cases, either must drastically reduce or completely remove from wastewater before discharging it into rivers, tributaries, and other surface waters. The criteria given in the California Toxics Rule are the water quality objectives for the state and must be achieved in the waters of the state with the relevant beneficial uses. If these objectives are not met within a water of the state identified as having beneficial uses, then that waterbody would be listed as impaired.

Federal Insecticide, Fungicide and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act, as amended (FIFRA), requires the EPA to regulate the sale and use of pesticides in the United States through registration and labeling of the pesticide products currently in use (EPA 2004). FIFRA directs the EPA to restrict the use of pesticides as necessary to prevent unreasonable adverse effects on people and the environment, taking into account the costs and benefits of various pesticide uses. FIFRA prohibits sale of any pesticide in the United States unless it is registered and labeled indicating approved uses and restrictions. It is a violation of the law to use a pesticide in a manner that is inconsistent with the label instructions. In addition, FIFRA requires EPA to reregister older pesticides based on new data that meet current regulatory and scientific standards. The EPA must ensure that use of pesticides it registers under FIFRA will not result in harm to species listed as endangered or threatened under the federal Endangered Species Act of 1973, as amended (ESA). The U.S. Fish and Wildlife Service (USFWS) provides technical assistance and consults with the EPA during the registration and re-registration of pesticides to prevent and minimize the impacts of pesticides on fish, wildlife, and plants. In addition, in 1988, the EPA's Endangered Species Protection Program (ESPP) was initiated. This program relies on cooperation between the Service, EPA Regions, states, and pesticide users. As part of this program, the EPA has created bulletins for individual counties within the United States, which can be accessed from the ESPP web site, that provide information on pesticide use limitations intended to minimize impacts to threatened and endangered species. For more information, visit the EPA's ESPP website at <http://www.epa.gov/espp/>.

Federal Endangered Species Act

The ESA was established in 1973 to conserve ecosystems and species that depend on those ecosystems. Section 4 of the ESA describes the listing process for determinations of endangered or threatened species. Section 7 requires that all federal agencies consult with the USFWS (with jurisdiction over plants, wildlife, and resident fish) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) (with jurisdiction over anadromous fish and marine fish and mammals) prior to approving or initiating a project that may result in "take" of a listed species. Section 9 of ESA prohibits the take of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. Take is defined as the action of or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule has been defined with regard to take at the time of listing. Candidate species and species that are proposed or under petition for listing receive no protection from the ESA.

Section 10 of the ESA requires that all non-federal actions that may likely adversely affect an ESA-listed species obtain an incidental take permit (Section 10 Permit) from USFWS and/or NOAA Fisheries. Applications for Section 10 permits must include a Habitat Conservation Plan and proof of National Environmental Policy Act (NEPA) compliance.

The use of pesticides on irrigated land could negatively impact threatened and endangered species, and their habitats, which could be considered "take" under Section 9 and unlawful without a Section 10 permit.

Migratory Bird Treaty Act

The USFWS protects and manages migratory birds through The Migratory Bird Treaty Act. This Act makes it unlawful to take, possess, import, export, transport, sell, barter, or purchase any migratory bird or bird product without an applicable Migratory Bird Permit or Hunting Permit.

National Resources Conservation Service Programs

Since 1935, the Natural Resources Conservation Service (NRCS, originally called the Soil Conservation Service) has provided leadership in a partnership effort to help America's private landowners and managers conserve their soil, water, and other natural resources. NRCS provides financial assistance for many conservation activities. Participation in NRCS programs is voluntary.

Some NRCS programs, such as the Farm Bill, help farmers and ranchers meet environmental challenges on their land and enhances the long-term quality of our environment and conservation of our natural resources. This includes aiding farmers in reducing NPS discharges or increasing wildlife habitats on their lands

through Agricultural Management Assistance (AMA) and similar programs. For more information, visit the NRCS website at <http://www.nrcs.usda.gov/Programs/ama>. AMA provides cost-share and incentive payments to agricultural producers to voluntarily address issues, such as water management, water quality, and erosion control by incorporating conservation practices into their farming operations. Producers may construct or improve water management structures or irrigation structures; plant trees for windbreaks or to improve water quality; and mitigate risk through production diversification or resource conservation practices, including soil erosion control, integrated pest management, or transition to organic farming.

State Programs Affecting Irrigated Lands Discharges

Porter-Cologne Water Quality Control Act (Division 7 of California Water Code)

The Porter-Cologne Act establishes the State Water Board and divides the state into nine regional basins, each with an RWQCB. The State Water Board and nine RWQCBs are the primary state agencies responsible for protecting the quality of the state's surface and groundwater resources.

The Porter-Cologne Act authorizes the State Water Board to draft state policies regarding water quality. In addition, the Porter-Cologne Act (Section 13263) authorizes the State Water Board and RWQCBs to issue general WDRs for projects or activities that would discharge waste to waters of the state. The Porter-Cologne Act requires that the State Water Board or the RWQCB adopt water quality control plans (Basin Plans) for the protection of water quality. A Basin Plan must identify beneficial uses of water to be protected, establish water quality objectives for the reasonable protection of the beneficial uses, and establish a program of implementation for achieving the water quality objectives.

The Porter-Cologne Act, Section 13260, requires

> any person discharging waste, or proposing to discharge waste that could affect the quality of the waters of the State, file a report of discharge (an application for waste discharge requirements) along with a filing fee, in anticipation that the Regional Water Board will provide Waste Discharge Requirements (WDRs).

The RWQCB is obligated to prescribe WDRs except where the Board finds that a waiver of WDRs for a specific type of discharge is in the public interest. Section 13269 also provides that any such waiver of WDRs shall be for a period not to exceed 5 years, is conditional and may be terminated at any time by the RWQCB.

Regulatory Tools and Options

Waste Discharge Requirements

Individual permits can be issued by an RWQCB to allow discharge of specified quantities and qualities of waste to land or surface waters. The limitations placed on the discharge are designed to ensure compliance with water quality objectives in the Basin Plans. To obtain a permit, the discharger must submit a Report of Waste Discharge (ROWD) and the requirements of CEQA must be met. All dischargers must submit monitoring reports and most dischargers pay an annual fee. The Board can use this approach to regulate any discharge to surface waters. The discharger would be responsible for providing enough information regarding the chemicals and volumes to be discharged and receiving waters to allow preparation of a permit. (Central Valley Water Board 2001.)

Conditional Waivers

The RWQCB is able to waive the requirement for an ROWD if the discharge is not against the public interest. The waivers must be conditional and may be terminated at any time by the Board. Waiver conditions can require actions by the discharger such as compliance with specified management practices and submittal of monitoring reports. If the ROWD is not waived, the discharger must provide sufficient information to verify that waiver conditions will be met.

Prohibitions of Discharge

The RWQCB may specify that either the discharge of waste is not allowed in certain areas or certain types of waste will not be permitted. This allows the Board to address cumulative discharges in any area and enforces compliance with other state agencies for the Basin Plan.

California Regional Water Quality Control Board—Water Quality Control Plans

RWQCBs develop Basin Plans for their regions, issue WDRs, take enforcement action against violators, and monitor water quality within the State of California. State policy for water quality control is directed at achieving the highest water quality consistent with the maximum benefit to the people of the state. To develop water quality standards consistent with the uses of a water body, the RWQCBs identify the (past, present, and probable future) beneficial uses for waters within its jurisdiction.

The preparation and adoption of Basin Plans is required by the California Water Code (Section 13240) and supported by the CWA. Section 303 of the CWA requires states to adopt water quality standards, which "consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." According to Section 13050 of the California Water Code, Basin Plans consist of a designation or establishment for the waters within a specified area of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives. State law also requires that Basin Plans conform to the policies set

forth in the Water Code beginning with Section 13000 and any state policy for water quality control. Since beneficial uses, together with their corresponding water quality objectives, can be defined per federal regulations as water quality standards, the Basin Plans are regulatory references for meeting the state and federal requirements for water quality control (40 CFR 131.20). One significant difference between the state and federal programs is that California's Basin Plans establish standards for ground waters in addition to surface waters. Another significant difference is that Basin Plans include programs of implementation, which can allow for time schedules.

Total Maximum Daily Loads (TMDLs)

Section 303(d) of the CWA requires that the states make a list of waters that are not attaining standards after the technology-based limits are put into place. For waters on this list (and where the EPA administrator deems they are appropriate) the states are to develop total maximum daily loads (TMDLs).

A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. The RWQCB sets water quality standards in its Basin Plan. They identify the uses for each waterbody (e.g., drinking water supply, contact recreation, and aquatic life support) and the water quality objectives to support that use. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality.

Central Valley Water Board Interim Conditional Waiver Program

On March 26, 1982, the Central Valley Regional Water Quality Control Board (Now Central Valley Water Board) adopted Resolution No. 82-036, "Waiving Waste Discharge Requirements For Specific Types Of Discharge." The resolution listed 23 categories of waste discharges, including irrigation return flows and storm water runoff from agricultural lands, and the conditions required to comply with the waiver. This waiver had conditions, but due to insufficient resources, verification that dischargers were complying with conditions was not conducted, and thus the 1982 waiver was largely a passive program.

In 1999, Senate Bill 390 was adopted and changed the section of the California Water Code authorizing waivers of WDRs. As a result of the changes, all waivers in place on January 1, 2000 would sunset January 1, 2003 if the Regional Board had not readopted them. This change in the law meant that the 1982 waiver, which included irrigation return flows and stormwater runoff from agricultural lands in the Central Valley, would sunset. Additionally, waivers could no longer exceed five years in duration.

In response, in November 2000, DeltaKeeper, San Francisco BayKeeper and the California Public Interest Research Group submitted a petition asking the Central Valley Water Board to rescind the waiver and use WDRs to control discharges of pesticides from irrigated lands. The Central Valley Water Board held a workshop in July 2001 to receive information related to this issue and in September 2001 adopted a resolution denying the petition, but directed staff to prepare recommendations on how to regulate this category of discharges by the end of 2002.

On December 5, 2002, the Central Valley Water Board adopted Resolution No. R5-2002-0201 and the associated conditional waiver of WDRs for discharges from irrigated lands. The conditional waiver was slated to terminate in two years. Public comment on the December conditional waiver was significant and came from a broad spectrum of interests. Additionally, Central Valley Water Board members had questions on certain aspects of the newly adopted waiver and directed staff to consider comments and questions, and synthesize this input into key issues, to analyze these issues, and provide options and recommendations that could address them. Modifications to the waiver were proposed in April 2003, and based upon further public comment and Central Valley Water Board direction, further modifications were proposed in June 2003.

On July 10, 2003 Resolution No. R5-2002-0201 was rescinded and on July 11, 2003, Resolution No. R5-2003-0105 was adopted by the Regional Board. Resolution No. R5-2003-0105 adopted two conditional waivers that were intended to remedy perceived procedural concerns and to clarify conditions contained in the December 2002 waiver. Under Resolution No. R5-2003-0105, one conditional waiver is for Coalition Groups or other entities that form on behalf of individual Dischargers to comply with the California Water Code and the Regional Board Plans and Policies. The second conditional waiver was for individual Dischargers. These conditional waivers were set to expire in January 2006.

On 26 February 2004, DeltaKeeper, WaterKeepers Northern California, Environment California, the Natural Resources Defense Council, Inc., and California Sportfishing Protection Alliance (collectively “DeltaKeeper”), filed a petition for peremptory writ of mandate in Sacramento County Superior Court (Court). DeltaKeeper alleged that in approving the conditional waivers, the Water Board violated the Porter-Cologne Act, including California Water Code Section 13269, and CEQA by relying on a negative declaration instead of preparing an environmental impact report (EIR).

On March 3, 2004, the California Farm Bureau Federation (Farm Bureau) also filed a petition for peremptory writ of mandate in Court. The Farm Bureau alleged that the scope of the required reports violated the California Water Code, that the Water Board cannot require compliance with water quality objectives, that reports are subject to trade secret protection, and that access provisions of the waiver were improper.

On May 9, 2005, the Court substantially upheld the conditional waivers, including upholding the conditional waivers with respect to CEQA and

California Water Code Section 13269. The Court granted, in part, the Farm Bureau's petition with respect to staff access to private property for inspections and confidentiality of monitoring reports. The Court also remanded the matter of the "tributary rule" to agricultural dominated water bodies and constructed agricultural drains to the Water Board to clarify:

> …the extent to which the Waiver is intended to apply to agricultural dominated waterways and constructed agricultural drains and other non-stream tributaries; the extent to which the Waiver purports to impose receiving water limitations upon such water bodies; and, in light of the foregoing, the extent to which the Waiver may rely on application of the Tributary Rule for these purposes. [Ruling, at page 77].

In response to this ruling, the Water Board adopted two resolutions: Resolution No. R5-2005-0107 was adopted on August 5, 2005 amending Attachments B and C of the conditional waivers to address the issue of access to private property for inspections and confidentiality of monitoring reports, and Resolution No. R5-2005-0137 on October 20, 2005 to add an information sheet to Resolution No. R5-2003-0105 to provide a clarification of the application of the conditional waivers to agricultural dominated waterways and constructed agricultural drains consistent with the tributary rule.

While the conditional waivers were set to expire in January 2006, on November 28, 2005, the Central Valley Water Board voted to extend these conditional waivers for six months. The purpose of the extension was mostly to clarify rules pertaining to coalition group's membership lists and clarifications to the monitoring and reporting program. Action will be required prior to June 2006 to adopt a new interim conditional waiver while a more permanent irrigated lands program is developed.

California State Water Resources Control Board—Nonpoint Source Pollution Control Program

The California Water Code Section 13369 requires that the State Water Board in consultation with the California Coastal Commission and other appropriate agencies, prepare a detailed program for the purpose of implementing and enforcing the state's NPS management plan.

In January 2000, the State Water Board made public and submitted to the Legislature, the *Plan for California's Nonpoint Source Pollution Control Program* (NPS Program Plan), pursuant to Section 13369. The NPS Program Plan upgraded the state's first *Nonpoint Source Management Plan* adopted by the State Water Board in 1988 (1988 Plan). Upgrading the 1988 Plan with the NPS Program Plan brought the state into compliance with the requirements of Section 319 of the CWA and Section 6217 of CZARA. On May 20, 2004, the State Water Board adopted the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Implementation and Enforcement Policy). The NPS Implementation and Enforcement Policy provides guidance to the RWQCBs on how to develop, structure, and enforce an NPS

pollution control program and, in so doing, fulfills the requirements of California Water Code Section 13369(a)(2)(B).

An NPS pollution control implementation program is a program developed to comply with State Water Board or RWQCB WDRs, conditional waivers of WDRs, or Basin Plan prohibitions. They may be developed by an RWQCB, the State Water Board, an individual discharger, or by or for a coalition of dischargers in cooperation with a third-party representative, organization, or government agency.

The RWQCBs have primary responsibility for ensuring that the appropriate NPS control implementation programs are in place throughout the state. Given the extent and diversity of NPS pollution discharges, the RWQCBs need to be as creative and efficient as possible in devising approaches to prevent or control NPS pollution, including developing third-party NPS control programs. Third party programs allow RWQCBs to reach multiple dischargers that individually may be unknown.

RWQCBs are not required to endorse or approve any specific NPS pollution control implementation program. Each program brought before an RWQCB or State Water Board is individually judged on its merits.

The Key Elements of a Nonpoint Source Pollution Control Implementation Program

Before an RWQCB approves or endorses a specific NPS pollution control implementation program, the RWQCB must determine that there is a high likelihood the implementation program will attain the RWQCB's stated water quality objectives. In order to be approved or endorsed, the NPS pollution control implementation program must meet the requirements of the five key structural elements described below. Development of Elements 1 and 2 are the primary responsibility of those who are developing the implementation program. Elements 3 and 4 may require consultation with the appropriate RWQCB. Element 5 shall be developed by the RWQCB.

For implementation programs developed by non-regulatory parties, factors such as availability of funding, a demonstrated track record or commitment to NPS control implementation, and a level of organization and group cohesion that facilitates NPS control implementation are among the critical factors that must be taken into account. For regulatory programs, the availability of staff resources to administer the implementation may be a major concern.

Key Element 1. An NPS control implementation program's ultimate purpose shall be explicitly stated. Implementation programs must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable antidegradation requirements.

Key Element 2. An NPS control implementation program shall include a description of the management practices and other program elements that are expected to be implemented to ensure attainment of the implementation program's stated purpose(s), the process to be used to select or develop

management practices, and the process to be used to ensure and verify proper management practice implementation.

An RWQCB must be able to determine that there is a high likelihood that the program will attain water quality objectives. This will include consideration of the management practices to be used and the process for ensuring their proper implementation. It also will include other factors such as the level of discharger participation and the effectiveness of the management practices implemented.

Key Element 3. Where an RWQCB determines it is necessary to allow time to achieve water quality objectives, the NPS control implementation program shall include a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements.

Key Element 4. An NPS control implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine whether the program is achieving its stated purpose(s), or whether additional or different management practices or other actions are required.

In all cases the NPS control implementation program should describe the measures, protocols, and associated frequencies that will be used to verify the degree to which the management practices are being properly implemented and are achieving the program's objectives, and/or to provide feedback for use in adaptive management. These efforts are necessary to determine whether the program is on time and on track in achieving its goals.

Key Element 5. Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS control implementation program's stated purposes.

As part of the fifth element, the RWQCBs need to explain how significant non-compliance can be addressed in third party programs. This explanation should include information as to the criteria for measuring program success, what constitutes failure, and the actions that may be taken in response to failure. Individual dischargers need to be informed as to what individual discharger actions or inactions will lead to individual enforcement. This explanation is necessary so that participating dischargers understand the ramifications of non-compliance, even if that non-compliance is by a third party they have selected as their representative. Options short of individual enforcement actions could include RWQCB actions such as changing a program to remove some autonomy, or developing sequential enforcement phases related to triggering events built into the program. Ultimately, the ineffectiveness of a group through which a discharger participates in NPS control efforts cannot be used as an excuse for lack of individual discharger compliance.

An RWQCB implements enforcement through an "...escalating series of actions that allows for the efficient and effective use of enforcement resources to: (1) assist cooperative dischargers in achieving compliance; (2) compel compliance for repeat violations and recalcitrant violators; and (3) provide a disincentive for noncompliance."

In cases of individual noncompliance, selective enforcement actions may be taken. In cases of third-party noncompliance, an effort to revise the third-party program is an alternative. Generally, prior to initiating major revisions to a program, informal contact with dischargers, group representatives, or other third parties, if any, will be attempted in order to redirect unsuccessful efforts. However, although the direction and efforts of a particular third-party program are being undertaken as a group effort, with group designated or accepted leadership, if the group or third-party fails to follow through on their commitments, any RWQCB enforcement action taken will be against individual dischargers, not the third-party.

State Implementation Policy for Toxics Standards

The state policy for water quality control (Policy), adopted by the State Water Board on March 2, 2000 and effective by May 22, 2000 applies to discharges of toxic pollutants into the inland surface waters, enclosed bays, and estuaries of California subject to regulation under the Porter-Cologne Act (Division 7 of the Water Code) and the CWA. Regulation of the Policy may occur through the issuance of NPDES permits, or other relevant regulatory approaches. The goal of the Policy is to establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency. The Policy is a tool to be used in conjunction with watershed management approaches and, where appropriate, the development of TMDLs to ensure achievement of water quality standards (i.e., water quality criteria or objectives, and the beneficial uses they are intended to protect, as well as the state and federal anti-degradation policies).

The State Implementation Policy for Toxics Standards establishes:

(1) implementation provisions for priority pollutant criteria promulgated by the EPA through the National Toxics Rule and through the California Toxics Rule, and for priority pollutant objectives established by RWQCBs in their Basin Plans;

(2) monitoring requirements for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) equivalents; and

(3) chronic toxicity control provisions.

In addition, the Policy includes special provisions for certain types of discharges and factors that could affect the application of other provisions in this Policy.

California Agricultural Herbicide and Pesticide Regulations

The California Department of Pesticide Regulation (DPR) within the California Environmental Protection Agency (CalEPA) is responsible for administering state regulations for the safe permitting, use, and storage of pesticides. The

state's regulations are in addition to the federal regulations for pesticide use set down in FIFRA (described earlier). In general, the regulations establish a system of tracking and reporting pesticide use; permit requirements for the storage, use and application of pesticides; rules for the application of pesticides, including restrictions on the time and place of use; and rules for licensing and training applicators. The regulations aim to avoid the overuse of pesticides, keep the pesticides out of surface and groundwater supplies, minimize worker exposure, and ensure that pesticides do not leave the site to which they are being applied. These requirements are embodied in Title 3 of the California Code of Regulations, commencing with Section 6000. DPR relies upon County Agricultural Commissioners (CACs) to carry out permitting and inspection functions under these regulations.

California Drinking Water Standards

The California Department of Health Services Drinking Water Standards are found in Title 22 of the California Code. These standards include sampling and testing of drinking water before and after treatment. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground it can pick up contaminants. In order to ensure that tap water is safe to drink, drinking water must be tested and certified before it can be distributed to the consumer. All drinking water must not exceed the maximum contaminant levels (MCLs) for all listed pollutants, such as pesticides and herbicides, known to occur in drinking water sources. Water suppliers are required to meet MCL levels by treating the source water using ion exchange, reverse osmosis, lime softening, or coagulation/filtration, as necessary.

California Food and Agriculture Regulations

The California Department of Food and Agriculture (CDFA) is responsible for ensuring the delivery of safe food and fiber through responsible environmental stewardship in a fair marketplace for all Californians. The policies of CDFA are carried out and enforced by the CACs or their respective representatives. CACs have broad authority under Division 6 of the California Food and Agricultural Code (CFAC) to access private property for CFAC enforcement activities such as audits, inspections, investigations, sampling, or testing. The CFAC also authorizes the DPR and the CACs to discipline pesticide use violators through various types of sanctions and to protect the public by prohibiting or stopping hazardous activities.

The CDFA, supports fertilizer programs that help prevent toxins and contaminants from entering the food chain. One of these programs is the Fertilizer Research and Education Program (FREP) that was created to advance the environmentally safe and agronomically sound use and handling of fertilizer materials. Most of FREP's original work was concerned specifically with nitrate contamination of groundwater. FREP facilitates and coordinates research and

demonstration projects by providing funding, developing and disseminating information, and serving as a clearinghouse for information on this topic. FREP serves growers, agricultural supply and service professionals, extension personnel, public agencies, consultants, and other interested parties. (CDFA 2005.)

The CDFA, Center for Analytical Chemistry, Environmental Monitoring Section (EMS), provides analytical support and services to the DPR. EMS performs analyses to monitor the environmental fate of pesticides. It monitors pesticides in all areas except food. It also monitors groundwater and surface water under the Ground Water Protection Plan.

In addition, CDFA is charged to collaborate with CAC's and manufacturers to:

- provide for the proper, safe, and efficient use of pesticides essential for production of food and fiber and for protection of the public health and safety;
- protect the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides;
- assure the agricultural and pest control workers of safe working conditions where pesticides are present;
- permit agricultural pest control by competent and responsible licensees and permittees under strict control of the director and commissioners;
- assure consumers and users that pesticides are properly labeled and are appropriate for the use designated by the label and that state or local governmental dissemination of information on pesticidal uses of any registered pesticide product is consistent with the uses for which the product is registered;
- and, encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to nontarget organisms and the environment.

California Environmental Quality Act

CEQA is the fundamental environmental law in California. CEQA encourages the protection of all aspects of the environment by requiring state and local agencies to prepare multidisciplinary environmental impact analyses and to make decisions based on those studies' findings regarding the environmental effects of the proposed action.

CEQA's main objectives are to disclose to decision-makers and the public the significant environmental effects of proposed activities and to require agencies to avoid or reduce the environmental effects by implementing feasible alternatives or mitigation measures. Disclosure is given in an EIR, negative declaration, or

mitigated negative declaration depending on whether affects caused by the project are significant, less than significant, or can be reduced to less than significant by incorporating mitigation into the project.

California Endangered Species Act

The California Endangered Species Act (CESA) was adopted in 1984 (California Fish and Game Code Section 2050 et seq.) to help protect threatened and endangered plant and animal species. Under CESA, the term "endangered species" is defined as a species of plant, fish, or wildlife which is "in serious danger of becoming extinct throughout all, or a significant portion of its range" and is limited to species or subspecies native to California. The term "threatened species" is defined as a plant or animal species that, "although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future." Administered by the California Department of Fish and Game (DFG), CESA establishes a petitioning process for the listing of threatened or endangered species. The California Fish and Game Commission is required to adopt regulations for this process and establish criteria for determining whether a species is endangered or threatened. The California Code of Regulations Title 14 §670.1(a) sets forth the required contents for such a petition.

Pursuant to CESA, a permit from DFG is required for projects that could result in the take of a state-listed threatened or endangered plant or animal species. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but does not include "harming" or "harassing", as the ESA does. As a result, the threshold for take is higher under CESA than under the ESA (i.e., habitat modification is not necessarily considered take under CESA).

Under Section 2086 of the Fish and Game Code, incidental take is authorized for agricultural activities under approved management plans. Under Section 2087, accidental take during agricultural activities qualify as an exception to the take prohibition.

County/Regional Programs Affecting Irrigated Lands Discharges

Agricultural Commissioners Programs

In California, County Agricultural Commissioners (CACs) administer DPR's pesticide regulatory program, and FIFRA by prohibiting, regulating or ensuring proper stewardship of pesticides. For additional information, see <http://www.cdpr.ca.gov/docs/legbills/regshome.htm> and <http://www.epa.gov/region5/defs/html/fifra.htm>.

CACs monitor the working conditions of agricultural and pest control workers, including the equipment, training, and safety measures in place to protect employees who work with or around pesticides.

CACs issue site-specific permits to purchase and use regulated agricultural chemicals. The CACs evaluate the proposed application to determine if the pesticide can be used safely, particularly in sensitive areas, such as near wetlands, residential neighborhoods, schools, or organic fields and ensure that applicators take precautions to protect people and the environment. Based on the CAC's evaluation, the CAC may issue or deny a permit or require specific use practices for the pesticide.

Prior to issuing a permit, the CAC considers the need for the pesticide application and whether a safer pesticide or better method of application could be effectively used to prevent misapplication or drift, and possible contamination of people or the environment.

CACs enforce regulations to protect ground and surface water from pesticide contamination, sometimes working with RWQCBs or the State Water Board.

CACs are also responsible for reporting pesticide use, investigating accidents or incidents involving pesticide use, promoting best management practices, and monitoring applications in the field.

Management Agency Agreement between the State Water Resources Control Board and the Department of Pesticide Regulation

The State Water Board, Central Valley Water Board, DPR, and two CACs have entered into the Management Agency Agreement (MAA). The purpose of the MAA is to promote technical and policy consultations concerning pesticide water quality issues, to implement a pesticide detection notifications system, to collect, exchange, and disseminate information on pesticides and impacts on the quality of the state's waters, and to ensure that compliance with the State and Regional Boards' established numerical and narrative water quality objectives are achieved. For more information on the MAA please see <http://www.cdpr.ca.gov/docs/dprdocs/waterpln/maa.htm>.